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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,344	02/14/2002	Roger S. Twede	10012140-1	2488

7590 05/05/2005

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
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EXAMINER

STEVENS, ROBERT

ART UNIT	PAPER NUMBER
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2176

DATE MAILED: 05/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/077,344

Applicant(s)

TWEDE ET AL.

Examiner

Robert M Stevens

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 November 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communications: Application No. 10/077,344 amendment filed 2/7/2005 to the original application filed 2/14/2002 by Twede et al. entitled "System and Method for Chained Format Translation".
2. The Office withdraws objections raised in the First Action on the Merits (FAOM) concerning the specification, in light of the amendment.
3. The Office withdraws objections to the drawings raised in the FAOM, in light of the amendment.
4. The Office withdraws claims rejections under 35 USC 112 1st paragraph raised in the FAOM, in light of the amendment. However, as far as Applicant's claims that inefficiency is patentable, the Office notes that substituting a multi-step solution for a conventional single step process (like a file format conversion) is not only inefficient, but also obvious to one skilled in the art.
5. The FAOM rejections of claims 1-23 under 35 USC 103(a) as being unpatentable over Chang in view of Jacobs and Merz, have been withdrawn as necessitated by amendment.
6. Claims 1-23 are pending. Claims 1, 12 and 21 are independent.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1-23 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Cyr et al (US Patent No. 5,819,014, filed Nov. 15, 1996 and issued Oct. 6, 1998, hereafter referred to as "Cyr") in view of Williams et al (US Patent No. US 5,513,323, filed Jun. 14, 1991 and issued Apr. 30, 1996, hereafter referred to as "Williams") and further in view of Tolfa (US Patent No. US 6,619,664, filed Feb. 21, 1997 and issued Feb. 27, 2001, hereafter referred to as "Tolfa").

Regarding independent claim 1, Cyr discloses:

A method of converting a datafile having a first format into a second format for printing, comprising:

conveying the datafile in a first format to a printer, said printer including a controller; (Abstract, Fig. 4 #25, Fig. 3 #67)

activating said controller to access (Fig. 6 #66, 25 and Fig. 4 #25) ... over a network, ... ; (Fig. 2,3,4 #10)

using said controller to select (Fig. 6 #12, 14, 16, 66 and 25) ... for sequentially converting said datafile from said first format to said second format; (Abstract and Fig. 4 #25)

conveying at least a first job specification command to at least one translator ... ; (Fig. 6 #66, 25, 12)

... ;

conveying said datafile in said second format to said printer; (Abstract)

and

printing said datafile from said second format. (Abstract)

Cyr, however, does not explicitly disclose:

... :

... ;
... ;
... ;
... *in said chain of translators, wherein a first translator from said chain of translators accesses said datafile in said first format and a second translator from said chain of translators directly accesses an output of said first translator; converting said datafile to said second format using chain of translators;*
... ; *and*
...

Williams, though, discloses:

... :
... ;
... ;
... ;
... *in said chain of translators, wherein a first translator from said chain of translators accesses said datafile in said first format and a second translator from said chain of translators directly accesses an output of said first translator;*
(Abstract, Title, Fig. 2)
... *converting said datafile to said second format using chain of translators;*
(Abstract, Title re: multistage format transformation)
... ; *and*
...

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Williams for the benefit of Cyr, because to do so would have allowed one to determine an optimal transformation from a first to a second document format, as taught by Williams in the Abstract. These references were all applicable to the same field of endeavor, i.e., electronic document format conversion.

Cyr, furthermore, does not explicitly disclose:

... :
... ;

... a registry database ... , said registry database containing a listing of available translators;
... a chain of translators from said registry database ...;
... ;
... ;
... ; and
...

Tolfa, though, discloses:

... ;
... a registry database ... , said registry database containing a listing of available translators; (Fig. 1 #22 re: 1st ... Nth Translator Family DLL)
... a chain of translators from said registry database ...; (Fig. 1 #22 re: 1st ... Nth Translator Family DLL)
... ;
... ;
... ; and
...

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Tolfa for the benefit of Cyr in view of Williams, because to do so would have allowed one to determine the best path for converting a file from one format to another, as taught by Tolfa in the Abstract. These references were all applicable to the same field of endeavor, i.e., electronic document format conversion.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Cyr, Williams and Tolfa, because these references were all applicable to the same field of endeavor, i.e., electronic document format conversion.

Regarding claim 2, which is dependent upon claim 1, Cyr further discloses:

where said printer further comprises a web server. (Fig. 5 #48, it being merely a matter of obvious design choice as to whether a printing service is hosted on a local or remote platform)

Regarding claim 3, which is dependent upon claim 2, Cyr further discloses:

wherein said at least a first job specification command is conveyed using said web server. (Fig. 4 #25, it being merely a matter of obvious design choice as to whether an element has network access)

Regarding claim 4, which is dependent upon claim 1, Cyr further discloses:

wherein said at least first job specification command comprises a uniform resource locator (URL). (Fig. 6 #66, 25, the format of a job specification command being merely a matter of obvious design choice)

Regarding claim 5, which is dependent upon claim 1, Cyr further discloses:

wherein said at least first job specification command is conveyed to a last translator in said chain of translators. (Fig. 6 #66, 25, 16, it being merely a matter of obvious design choice as to what/how many translators one sends commands to)

Regarding claim 6, which is dependent upon claim 5, Cyr further discloses:

wherein said at least a first job specification command activates said last translator to access data directly from said prior translator in said chain of translators. (Fig. 6 #66, 25, 16, it being merely a matter of obvious design choice as to what/how many translators one sends commands to, it also being implied that a translator can receive input data and send output data)

Regarding claim 7, which is dependent upon claim 1, Cyr further discloses:

wherein said at least first job specification command is conveyed to said first translator. (Fig. 6 #66, 25, 16, it being merely a matter of obvious design choice as to what/how many translators one sends commands to)

Regarding claim 8, which is dependent upon claim 7, Cyr further discloses:

wherein said at least first job specification command activates said first translator to directly convey output data to said second translator. (Fig. 6 #66, 25, 16, it being merely a matter of obvious design choice as to what/how many translators one sends commands to, it also being implied that a translator can receive input data and send output data)

Regarding claim 9, which is dependent upon claim 1, Cyr further discloses:

wherein said registry database is contained on a computer that is geographically separate from said printer, and accessing said registry database is accomplished over a network connection. (Fig. 2 and 4 #10 show access to a network, it being merely a matter of obvious design choice to distribute/separate processing elements like a computer, printer and database, and then interconnect them via a network)

Regarding claim 10, which is dependent upon claim 1, Cyr further discloses:

where said first translator and said second translator are located on geographically separate computers that are accessible to one another and to said printer over a network. (Fig. 2 #14 and #12 shown interconnected via a network bus)

Regarding claim 11, which is dependent upon claim 10, Cyr further discloses:

wherein said network includes the internet. (Fig. 2 and 4, noting #10, it being merely a matter of obvious design choice as to the network one uses [e.g., Internet, Intranet, etc.])

Regarding independent claim 12, Cyr discloses:

A method of linking format conversion programs to convert a datafile from an initial format into a desired final format, comprising:
accessing ... over a network; (Fig. 2,3,4 #10)
... ;
conveying at least a first job specification command to at least one translator ... ; (Fig. 6 #66, 25, 12)
converting said datafile to said desired final format (col. 3 lines 24-35) ...
until said datafile is converted into said desired final format. (col. 3 lines 24-35)

Cyr, however, does not explicitly disclose:

... :

... ;

selecting among said translators to design a chain of translators capable of sequentially converting said datafile from said initial format to said desired final format, said chain of translators including an initial translator and at least one subsequent translator;

... in said chain of translators to activate to initiate said chain of translators, such that said initial translator in said chain of translators accesses said datafile in said initial format and said at least one subsequent translator in said chain of translators directly accesses an out-put of said initial translator;

... as said initial translator in said chain of translators accesses said initial format datafile and converts it into said output in another format, and each said subsequent translator in said chain of translators directly accesses said output of a prior translator in said chain of translators and converts it into a subsequent format

Williams, though, discloses:

... :

... ;

selecting among said translators to design a chain of translators capable of sequentially converting said datafile from said initial format to said desired final format, said chain of translators including an initial translator and at least one subsequent translator; (Abstract, Fig. 2)

... in said chain of translators to activate to initiate said chain of translators, such that said initial translator in said chain of translators accesses said datafile in said initial format and said at least one subsequent translator in said chain of translators directly accesses an out-put of said initial translator; (Abstract, Fig. 2)

... as said initial translator in said chain of translators accesses said initial format datafile and converts it into said output in another format, and each said subsequent translator in said chain of translators directly accesses said output of a prior translator in said chain of translators and converts it into a subsequent format (Abstract, Fig. 2)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Williams for the benefit of Cyr, because to do so would have allowed one to determine an optimal transformation from a first to a second document format, as taught

by Williams in the Abstract. These references were all applicable to the same field of endeavor, i.e., electronic document format conversion.

Cyr, furthermore, does not explicitly disclose:

... :
... *a registry database containing information on translators to determine what translators are available ...* ;
... ;
... ;
... .

Tolfa, though, discloses:

... :
... *a registry database containing information on translators to determine what translators are available ...* ; (Fig. 1 #22, re: 1st... Nth Translator Family DLL)
... ;
... ;
... .

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Tolfa for the benefit of Cyr in view of Williams, because to do so would have allowed one to determine the best path for converting a file from one format to another, as taught by Tolfa in the Abstract. These references were all applicable to the same field of endeavor, i.e., electronic document format conversion.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Cyr, Williams and Tolfa, because these references were all applicable to the same field of endeavor, i.e., electronic document format conversion.

Claims 13-20 are substantially similar to claims 4-11, respectively, and therefore likewise rejected.

Regarding independent claim 21, Cyr discloses:

*A system for printing a datafile in an unsupported initial format, comprising:
... using a network; (Fig. 2,3,4 #10)
a printer attached to said network (Fig. 4 #20, 18, 10), said printer configured to receive datafiles in a number of unsupported initial formats and to print datafiles from an appropriate final format, said printer further comprising a controller; (Fig. 4 esp. #20, 10, 12, 14, 16, 25)
said controller configured to initiate a translation of said datafile from said unsupported initial format into said appropriate final format by accessing (Fig. 4 #25, 12, 14, 16 and Abstract) ... over said network ... ; (Fig. 2,3,4 #10)
said printer further configured to convey at least a first job specification command to at least one translator (Fig. 6 #66, 25, 12) ... , such that said initial translator in said chain of translators accesses said datafile in said unsupported initial format (Fig. 6 #11, 25, 12) and ... until said datafile is converted into said appropriate final format allowing the datafile to be printed. (Abstract and col. 3 lines 24-35)*

Cyr, however, does not explicitly disclose:

*... ;
... ;
... ;
... designing a chain of translators capable of sequentially converting said datafile from said unsupported initial format to said appropriate final format including an initial translator and at least one subsequent translator to perform the conversion;
... in said chain of translators to activate to initiate said chain of translators, ... each subsequent translator in said chain of translators directly accesses an output of a prior translator in said chain of translators to convert said datafile into a subsequent format*

Williams, though, discloses:

... ;

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... ;
 ... ;
 ... *designing a chain of translators capable of sequentially converting said datafile from said unsupported initial format to said appropriate final format including an initial translator and at least one subsequent translator to perform the conversion;* (Abstract, Title and Fig. 2)
 ... *in said chain of translators to activate to initiate said chain of translators,* (Abstract, Title and Fig. 2) ... *each subsequent translator in said chain of translators directly accesses an output of a prior translator in said chain of translators to convert said datafile into a subsequent format ...* . (Abstract, Title and Fig. 2)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Williams for the benefit of Cyr, because to do so would have allowed one to determine an optimal transformation from a first to a second document format, as taught by Williams in the Abstract. These references were all applicable to the same field of endeavor, i.e., electronic document format conversion.

Cyr, furthermore, does not explicitly disclose:

... :
 ... *a registry database containing information concerning a selection of datafile format translators that are available ...* ;
 ... ;
 ... *said registry database to determine an availability of said selection of translators ...* ;

Tolfa, though, discloses:

... :
 ... *a registry database containing information concerning a selection of datafile format translators that are available ...* ; (Fig. 1 #22 re: 1st ... Nth Translator Family DLL)
 ... ;

... said registry database to determine an availability of said selection of translators ... ; (Fig. 1 #22 re: 1st ... Nth Translator Family DLL)
...

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Tolfa for the benefit of Cyr in view of Williams, because to do so would have allowed one to determine the best path for converting a file from one format to another, as taught by Tolfa in the Abstract. These references were all applicable to the same field of endeavor, i.e., electronic document format conversion.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Cyr, Williams and Tolfa, because these references were all applicable to the same field of endeavor, i.e., electronic document format conversion.

Claims 22-23 are substantially similar to claims 9 and 11, respectively, and therefore likewise rejected.

Response to Arguments

9. Applicant's arguments filed 11/29/2004 have been fully considered but they are not persuasive.

Applicant's remarks on pages 11-12 of the amendment concerning the "Drawings", "Specification" and "Rejection of Claims Under 35 USC 112 1st paragraph" raised in the FAOM, have been addressed above.

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It is respectfully noted that Applicant's amendment to the claims significantly changes the scope of the claimed invention as a whole. As such, Applicant's arguments (pages 12-17 of the amendment) concerning FAOM rejections of claims 1-23 under 35 USC 103(a) as being unpatentable over Chang in view of Jacobs and Merz have been rendered moot.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Non-Patent Literature

Maglio, Paul, et al., "Intermediaries Personalize Information Streams", Communications of the ACM, Vol. 43 No. 8, Aug. 2000, pp. 96-101.

Kudo, Michiharu, et al., "XML Document Security based on Provisional Authorization", CCS '00, Athens, Greece, Nov. 2000, pp. 87-96 [ACM 1-58113-203-4/00/0011] (plus citation page).

Smith, John R., et al., "Scalable Multimedia Delivery for Pervasive Computing", ACM Multimedia '99, Orlando, FL, Oct. 1999, pp. 131-140 [ACM 1-58113-151-8/99/0010].

US Patents

Quarato et al	6,253,205
Arrouye et al	6,230,310
Bickmore et al	6,857,102
Moberg et al	6,697,872
Shaw et al	5,845,058
Chang et al	5,230,049
Kato	5,373,568

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert M Stevens whose telephone number is (571) 272-4102. The examiner can normally be reached on M-F 6:00 - 2:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on (571) 272-4090. The current fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Additionally, the main number for Technology Center 2100 is (571) 272-2100.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert M. Stevens
Reg. No. 47,972
Art Unit 2176
Date: April 29, 2005

rms



JOSEPH FEILD
SUPERVISORY PATENT EXAMINER